

REMARKS

Claims 2, 5, 8 and 10-15, as amended, remain herein. Claims 2, 5 and 8 have been amended. Support for the amendments may be found throughout the specification (see, e.g., original claims).

Applicants believe that this Amendment places this application fully in condition for allowance, and surely in better condition for any appeal. These applicants respectfully request entry of this Amendment and allowance of all claims 2, 5, 8 and 10-15.

1. Claims 1-10 were provisionally rejected for alleged obviousness-type double patenting over claims 1, 21 and 22 of U.S. Patent Application Serial No. 10/617,397 and claims 28, 29, 31, 38, 39, 41 and 49 of U.S. Patent Application Serial No. 11/207,933. Applicant respectfully requests deferral of any such rejection until the claims of the present application are deemed otherwise allowable.

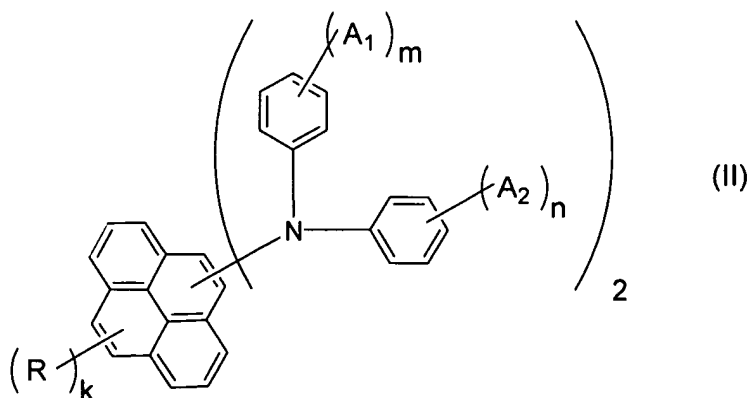
2. Claims 1-10 and 12 were provisionally rejected for alleged obviousness-type double patenting over claims 1-7 and 10 of U.S. Patent Application Serial No. 11/547,233; claims 1, 2, 5, 9, 10, 14, 18 and 22 of U.S. Patent Application Serial No. 11/761,437; and claims 1, 3-8, 10 and 12 of U.S. Patent Application Serial No. 11/547,306. Applicant respectfully requests deferral of any such rejection until the claims of the present application are deemed otherwise allowable.

3. Claims 1-12 were provisionally rejected for alleged obviousness-type double patenting over claims 1-8 of U.S. Patent Application Serial No. 11/596,299 and claims 1-10 of U.S. Patent Application Serial No. 11/575,441. Applicant respectfully requests deferral of any such rejection until the claims of the present application are deemed otherwise allowable.

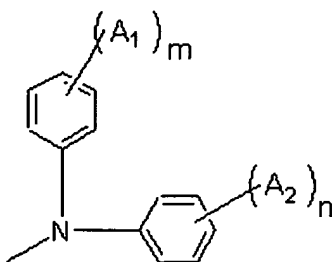
4. Claims 2, 5 and 10-12 were rejected under 35 U.S.C. § 112, second paragraph. Claim 2 has been amended to moot this rejection. Applicant respectfully requests reconsideration and withdrawal of this rejection.

5. Claims 2, 10 and 11 were rejected under 35 U.S.C. § 102(b) over Ohnuma et al. U.S. Patent 5,153,073.

Applicant's claim 2 recites an aromatic amine derivative represented by the following general formula (II):

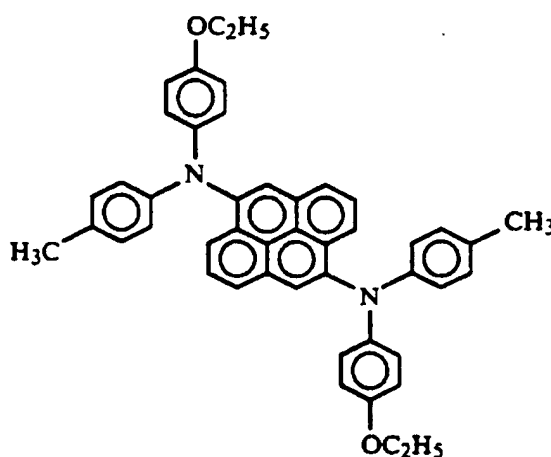


wherein at least one of A<sub>1</sub> and A<sub>2</sub> comprises an unsubstituted alkyl group having 2 or more carbon atoms or an unsubstituted cycloalkyl group having 3 or more carbon atoms; and the two groups represented by the following formula:

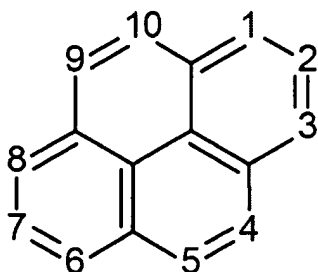


in the general formula (II), may be the same or different from each other, and bond to the pyrene ring at the 1-position and 6-position.

Ohnuma does not disclose applicant's claimed aromatic amine derivative. Ohnuma says nothing about an aromatic amine derivative including at least an unsubstituted alkyl group having 2 or more carbon atoms, or an unsubstituted cycloalkyl group having 3 or more carbon atoms, at the  $A_1$  or  $A_2$  group positions. In addition, Ohnuma says nothing about the diphenylamino groups bonding to a pyrene ring at the 1-position and 6-position. The Office Action states that applicant's claims read on Ohnuma's following compound 43:



However, in Ohnuma's compound 43, the diphenylamino groups do not bond to the pyrene ring at the 1-position and 6-position but at the 4-position and 9-position (see below pyrene group).

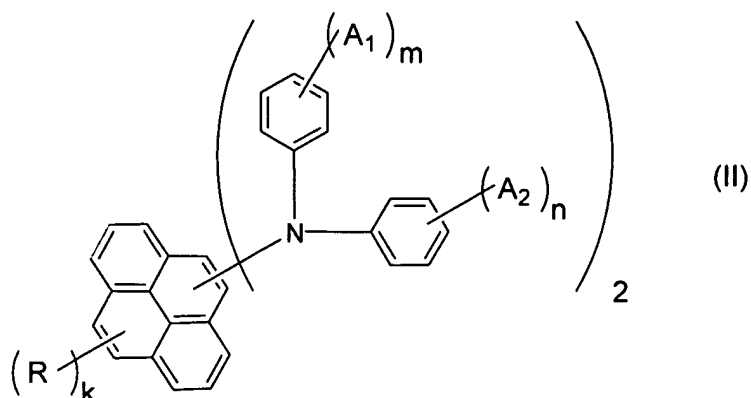


In addition, Ohnuma's compound 43 does not include an unsubstituted alkyl group having 2 or more carbon atoms, or an unsubstituted cycloalkyl group having 3 or more carbon atoms, at the A<sub>1</sub> or A<sub>2</sub> group positions.

Thus, Ohnuma does not disclose all limitations of applicant's claims, and, therefore, it is not an adequate basis for a rejection under § 102(b). Applicant respectfully requests reconsideration and withdrawal of this rejection.

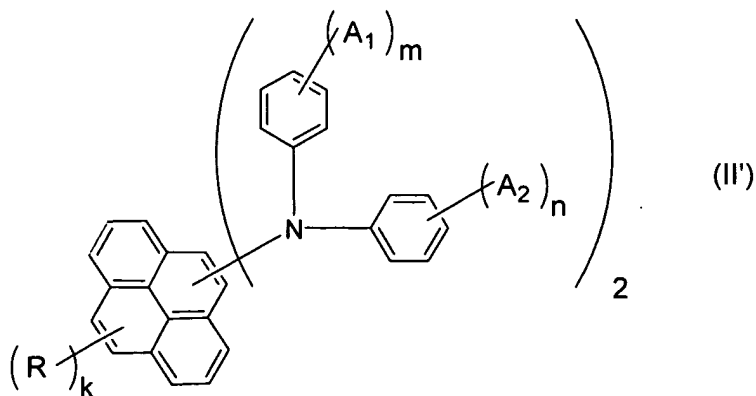
6. Claims 2, 5, 8 and 10-15 were rejected under 35 U.S.C. § 103(a) over Onikubo et al. U.S. Patent 6,280,859.

Applicant's claim 2 recites an aromatic amine derivative represented by the following general formula (II):



wherein  $A_1$  and  $A_2$  are each independently a hydrogen atom, an unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted or unsubstituted aryl group having 5 to 50 carbon atoms, an unsubstituted cycloalkyl group having 3 to 50 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 50 carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 carbon atoms, a substituted or unsubstituted arylamino group having 5 to 50 carbon atoms, a cyano group or a halogen atom; with the proviso that at least one of  $A_1$  and  $A_2$  comprises an unsubstituted alkyl group having 2 or more carbon atoms, or an unsubstituted cycloalkyl group having 3 or more carbon atoms.

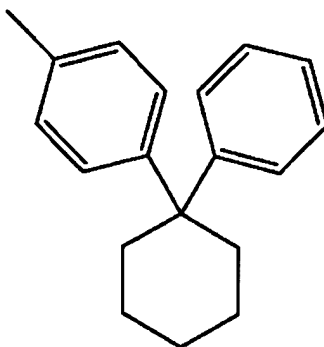
Applicant's claim 8 recites an aromatic amine derivative represented by the following general formula (II'):



wherein  $A_1$  and  $A_2$  are each independently a hydrogen atom, a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted or unsubstituted aryl group having 5 to 50 carbon atoms, a substituted or unsubstituted cycloalkyl group having 3 to 50 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 50 carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 carbon atoms, a substituted or unsubstituted arylamino group having 5 to 50 carbon atoms, a substituted or unsubstituted alkylamino group having 1 to 20 carbon atoms, a cyano group or a halogen atom; with the proviso that at least one of  $m$  and  $n$  is an integer of 2 or more.

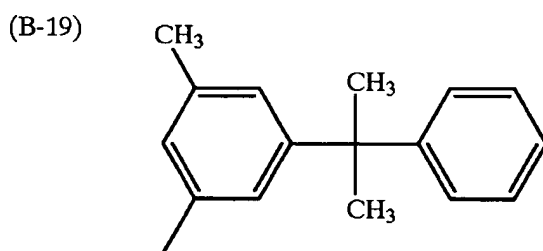
Onikubo does not teach or suggest applicant's claimed aromatic amine derivative. Onikubo says nothing about applicant's aromatic amine derivative of claim 2, comprising an unsubstituted alkyl group having 2 or more carbon atoms or an unsubstituted cycloalkyl group having 3 or more carbon atoms. In addition, Onikubo says nothing about applicant's aromatic amine derivative of claim 8 including at least two of applicant's claimed  $A_1$  and  $A_2$  groups. The Office Action states that applicant's claim 2 reads on Onikubo's compounds including Onikubo's following B-15 group:

(B-15)



However, Onikubo's B-15 group is a substituted cycloalkyl group while applicant's claim 2 requires that at least one of A<sub>1</sub> and A<sub>2</sub> comprises an unsubstituted alkyl group having 2 or more carbon atoms, or an unsubstituted cycloalkyl group having 3 or more carbon atoms.

Furthermore, the Office Action states that applicant's claim 8 reads on Onikubo's compounds including Onikubo's following B-19 group:



However, Onikubo's B-19 group discloses a phenyl group substituted with a methyl and an aralkyl group while applicant's claim 8 does not include aralkyl as an A<sub>1</sub> or A<sub>2</sub> group.

Thus, Onikubo does not disclose all elements of applicant's claims. Further, Onikubo discloses nothing that would have suggested applicant's claimed invention to one of ordinary skill in the art. There is no disclosure or teaching in Onikubo or otherwise in this record, that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. Applicant respectfully requests reconsideration and withdrawal of this rejection.

Serial No. 10/549,801  
Docket No. 28955.4035

Accordingly, all claims 2, 5, 8 and 10-15 are now fully in condition for allowance and a notice to that effect is respectfully requested. The PTO is hereby authorized to charge/credit any fee deficiencies or overpayments to Deposit Account No. 19-4293. If further amendments would place this application in even better condition for issue, the Examiner is invited to call applicant's undersigned attorney at the number listed below.

Respectfully submitted,

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